

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

IN RE: REMBRANDT TECHNOLOGIES, LP
PATENT LITIGATION

MDL Docket No. 07-md-1848(GMS)

ORDER CONSTRUING THE TERMS OF U.S. PATENT NO. 5,243,627

After having considered the submissions of the parties and hearing oral argument on the matter, IT IS HEREBY ORDERED, ADJUDGED, and DECREED that, as used in the asserted claims of U.S. Patent No. 5,243,627 (the “627 patent”):

1. The term “signal point” is construed to mean “a point on a 2-dimensional constellation having a pair of coordinates representing two components of a corresponding signal.”¹
2. The term “trellis encoded channel symbol . . . comprised of a plurality of signal points is construed to mean “two or more signal points all selected using the same group of parallel input bits as expanded once by a trellis encoder.”
3. The term “stream[] of trellis encoded channel symbols” is construed to mean “a sequence of trellis encoded channel symbols in which each symbol’s signal points are adjacent.”²

¹ “It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (citation and internal quotations omitted). Patent claims, however, “must be read in view of the specification, of which they are a part.” *Id.* at 1315 (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996)). Thus, “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” *Id.* at 1316 (quoting *Renishaw PLC v. Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998)).

² See Footnote 1.

4. The term “means for generating a plurality of streams of trellis encoded channel symbols in response to respective portions of said input information” is a means-plus-function term pursuant to 35 U.S.C. § 112(6). The function of the term is “generating a plurality of streams of trellis encoded channel symbols in response to respective portions of said input information.” The corresponding structure is “a distributed trellis encoder comprised of three or more trellis encoder stages” and all equivalents thereof.³
5. The term “means for interleaving the signal points of said generated channel symbols to form said (a) stream of trellis encoded signal points” is a means-plus-function term pursuant to 35 U.S.C. § 112(6). The function of the term is “interleaving the signal points of said generated channel symbols to form said stream of trellis encoded signal points.” The corresponding structure is “signal point interleaver 341 including delay element 3411 or signal point interleaver 641 including delay elements 6411, 6412, and 6413,” and all equivalents thereof.⁴
6. The term “receiver apparatus” is construed to mean “a device that receives a transmission signal.”⁵

³ See ‘627 patent at 4:64-5:5 (“The trellis bits, on lead 309, are provided . . . to a distributed trellis encoder comprised of three trellis encoder stages. . . . Such a distributed trellis encoder . . . generates a plurality of streams of trellis encoded channel symbols in response to respective portions of the input information.”); see id. at 9:4-7 (“If a greater separation of such signal points is desired, more stages can be added to the distributed trellis encoder/Viterbi decoder. . . .”). Further, this structure can be implemented using a programmed processor, as described in the ‘627 patent. See id. at 9:52-66.

⁴ The court rejects the plaintiff’s argument that the switching circuit performs signal point interleaving.

⁵ “In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (citing *Brown*

7. The term “interleaving the signal points of said generated channel symbols to form said stream of trellis encoded signal points” is construed to mean “separating the signal points of each generated trellis encoded channel symbol using other signal points.”⁶
8. The term “means for deinterleaving the interleaved signal points to recover said plurality of streams of trellis encoded channel symbols” is a means-plus-function term pursuant to 35 U.S.C. § 112(6). The function of the term is “deinterleaving the interleaved signal points to recover said plurality of streams of trellis encoded channel symbols.” The corresponding structure is “signal point deinterleaver 441, including delay element 4411 or signal point deinterleaver 741 including delay elements 7411, 7412, and 7413,” and all equivalents thereof.
9. The term “distributed Viterbi decoder for recovering (to recover) said information from the deinterleaved signal points” is construed to mean “a multiple stage decoder in which each stage operates on separate portions of a stream of deinterleaved signal points to recover the information decoded therein.”⁷
10. The term “deinterleaving the interleaved signal points to recover said plurality of streams of trellis encoded channel symbols” is construed to mean “restoring the adjacency of the

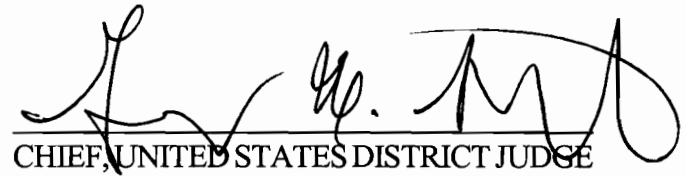
v. *3M*, 265 F.3d 1349, 1352 (Fed. Cir. 2001)).

⁶ The court rejects the defendants’ use of “adjacent” in this claim, because it is redundant, as the court has already determined that signal points are adjacent in construing the term “stream[] of trellis encoded channel symbols.”

⁷ The parties agree that a programmed processor, as described in the ‘627 patent, can be used to implement the Viterbi decoding. ‘627 patent at 9:52-66; D.I. 435 at 454:21-23 (“We are not disputing it can be implemented in software. But if it is, it has to be implemented in such a way that it has stages.”).

separated signal points of each trellis encoded channel symbol to recover the two or more streams of trellis encoded channel symbols.”

Dated: November 7, 2008



CHIEF, UNITED STATES DISTRICT JUDGE